

application (PCT/JP99/00896) from the Japanese language to English language.

Reconsideration in view of the above amendments and following remarks is respectfully requested.

The attached Appendix includes a marked-up copy of each rewritten paragraph (37 C.F.R. §1.121(b)(2)(ii)).

Applicant thanks Supervisory Examiner Cassandra Spyrou and Examiner Arnel Lavarias for the courtesies extended to Applicant's representative, Mr. Paul Tsou, during the October 3 personal interview. The substance of the personal interview is incorporated in the remarks below.

### **February 22, 2002, Restriction Requirement**

As agreed to during the interview, the February 22 Restriction Requirement is withdrawn and proposed new claim groupings are provided below for a new Restriction Requirement to be issued. The proposed new groupings are as follows:

	<b>Features</b>	<b>Originally Filed Claim Nos.</b>
I	· Spatial/Phase modulation of reference light; and · Reference and information lights impinge from same side of medium	1, 2, 6-8, 11, 16 and 44
II	· Reference and information lights are colinear immediately prior to final lens	3, 9, 14, 18, 22, 26, 29 and 39 <i>15, 19, 16, 18, 28, 29, 32, 38, 39, 44 — 1st Divisional</i>
III	· Asking servo that maintains the same position on the recording medium; · Recording location address	13, 17, 18, 21, 25, 36, 42 and 47
IV	· Draw and Verify	32-34
V	· Plural wavelength bands	4, 10, 12, 15, 16, 19, 30 and 40
VI	· Phase encoding and RAID	5
VII	· Separate reference and information light paths and merge light paths into colinear light	Means elements of 1, 12, 20 and 28
VIII	· Optical recording medium; · single and double sided; · Hole burning	46-50
IX	· Spatial modulation; · Plural wavelengths; · Same side	20, 23, 24, 27, 28 and 38
X	· Light Monitoring	31 and 41
XI	· Fixing	35
XII	· Multiple pickup devices	37, 43 and 45

As discussed during the interview, not all groupings include independent claims. However, as explained in detail during the interview, the claims are grouped around inventive features, which are listed in the above table.

Applicant respectfully requests a new Restriction Requirement grouping the claims as indicated above. Subsequent to receiving the Restriction Requirement, Applicant will file divisional applications corresponding to the above indicated groups which do not already have divisional applications.

### **Objections**

The Office Action objects to the Abstract because of minor informalities. The Abstract now obviates the objection. Accordingly, Applicant respectfully requests that the objection be withdrawn.

### **Claim Rejections**

The Office Action rejects claims 1-2 and 6-8 under 35 U.S.C. §102(e) over Horimai et al. (U.S. Patent No. 5,917,798), and claims 16-17 under 35 U.S.C. §103(a) over Horimai et al. in view of page 6, lines 20-23 of the specification. Applicant respectfully traverses the rejections.

In particular, Applicant respectfully asserts that Applicant is the sole inventor of the subject matter disclosed in Horimai that corresponds to claims 1-2, 6-8, 16 and 17. A Rule 132 Declaration by Applicant, who is a co-inventor of Horimai, is attached hereto and asserts that Mr. Horimai is the inventor of the subject matter recited in claims 1-50 and disclosed in the Horimai reference. Therefore, Horimai is removed as prior art. Accordingly, Applicant respectfully requests that the rejections of claims 1-2 and 6-8 under 35 U.S.C. §102(e) and claims 16 and 17 under 35 U.S.C. §103(a) be withdrawn.

Claims 11, 44 and 51-60 are also believed to be patentable.

In view of the above, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-2, 6-8, 11, 44 and 51-60 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,

James A. Oliff  
Registration No. 27,075

Paul Tsou  
Registration No. 37,956

JAO:PXT/sld

Attachments:

Appendix  
Substitute Abstract  
Rule 132 Declaration  
Petition for Extension of Time  
Information Disclosure Statement

Date: October 10, 2002

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
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## APPENDIX

## Changes to Specification:

Page 6, lines 3-23:

In addition to the above-described angle multiplex, proposed prior-art methods for multiplex recording for holographic recording include: phase-encoding multiplexing as disclosed, for example, in an article of J. R. Heanue et al., "Recall of linear combinations of stored data pages based on phase-code multiplexing in volume holography", Optics Letters, Vol.19, No. 14, pp.1079-1081, 1994 and an article of J.F. Heanue et al., "Encrypted holographic data storage based on orthogonal-phase-encoding multiplexing", Applied Optics, Vol. 34, No. 26, pp. 6012-6015, 1995; and hole burning type wavelength multiplexing as disclosed, for example, in an article by Eiji YEGYU et al., "A study on novel recording and reproduction of ~~wavelength~~ 3-D Imaging Technique by frequency multiplexed type PHB holograms ~~utilizing PHB~~", Technical Report of IEICE, EDI93-87, HC93-54, pp. 1-5, 1993.

## Changes to Claims:

Claims 51-60 are added.

5. Of the subject matter disclosed and claimed in the above-identified application that is also disclosed in the '798 patent, I, as the inventive entity of this application, am the inventor of that subject matter and am the only inventor of that subject matter.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and/or imprisonment under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

Date: September 9, 2002

Hideyoshi Horimai  
Hideyoshi HORIMAI



#15 10/17/02  
B L  
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Hideyoshi HORIMAI

Group Art Unit: 2872

Application No.: 09/601,702

Examiner: Jon W. Henry

Filed: August 4, 2000

Docket No.: 106357

For: APPARATUS AND METHOD FOR RECORDING OPTICAL INFORMATION,  
APPARATUS AND METHOD FOR REPRODUCING OPTICAL  
INFORMATION, APPARATUS FOR RECORDING/REPRODUCING OPTICAL  
INFORMATION, AND OPTICAL INFORMATION RECORDING MEDIUM

**DECLARATION UNDER 37 C.F.R. §1.132**

Director of the U.S. Patent and Trademark Office  
Washington, D.C. 20231

Sir:

I, Hideyoshi Horiami, a citizen of Japan, hereby declare and state:

- NOV 21 2005  
Attention  
\* sent to examiner
1. I have reviewed the disclosure and claims of the above-identified patent application;
  2. I am the sole inventor of the subject matter disclosed and claimed in the above-identified patent application;
  3. I have reviewed and am familiar with the disclosure and claims of U.S. Patent No. 5,917,798 to Horimai et al., entitled "Apparatus and Method for Recording and/or Playing Back Optical Information and Media for IT Apparatus and Method for Recording and/or Playing Back Optical Information and Media for Them," which issued on June 29, 1999 from an application filed on August 21, 1997;
  4. I am the co-inventor of the subject matter disclosed and claimed in the '798 patent;